Figure 2.5 shows the results of this work. The confined DCP data yielded PR from 500 to 700 mm below the surface, while the unconfined DCP data yielded PR from 0 to 200 mm below the exposed surface of the 500 mm deep test pit excavations. The statistical analysis showed that there was no difference between the confined and unconfined PR for clay subgrade with a clay soil providing the vertical confinement (Livneh et al c. 1993).

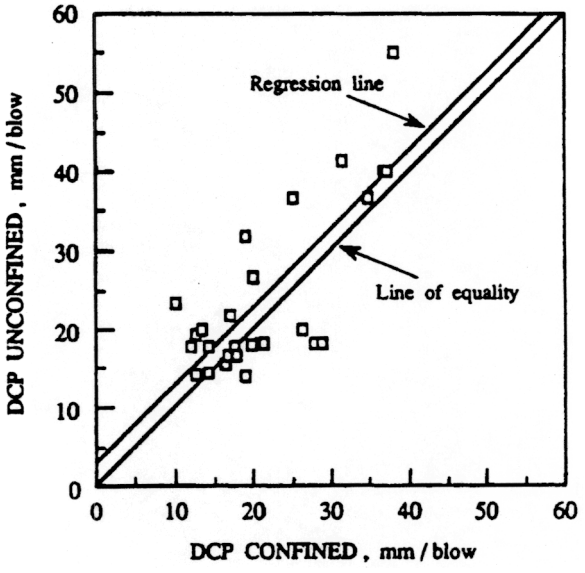

Figure 2.5 Correlation Between Confined and Unconfined DCP Within Clay Subgrades (Livneh, et al c. 1987)

To determine the vertical confining effect of an asphalt pavement on the predicted CBR values, the clay subgrade soil was penetrated with the DCP. The CBR value predicted by the DCP was then compared with the actual CBR measurement made in-situ through the cored asphalt pavement. Figure 2.6 shows that the CBR values predicted were 75 percent higher than the measured CBR values. To determine if the 75 percent increase was caused by the vertical confinement of the asphalt pavement on the clay subgrade or if the difference could be attributed to friction of the DCP against the asphalt